

Securities Lending

WHITEPAPER AUGUST 2023

CONTRIBUTORS Steve MacLellan, CFA Ted Benedict, CFA, CAIA Megan Bondar

Securities lending programs have the ability to generate modest incremental revenue for investors. During most periods, risk of loss is minimal; however, during periods of market disruption, the potential for liquidity impairment or loss exists.

Investors may find that controlled exposure to securities lending can provide added income with an acceptable risk level, especially in an environment of elevated interest rates. The amount of income, and risk, in any securities lending program is significantly determined by how the borrowing collateral is invested and the counterparties to which the lender is exposed.

Securities lending overview

In financial markets, broker-dealers facilitate investments in stocks and bonds by matching buyers to sellers. In some cases, a broker/dealer may have a willing buyer for a security, but no security to sell. To allow broker-dealers to deliver securities they do not own, custodian banks and large endowments began "securities lending" programs in the 1970s. By using a securities lending service, an investor who is "short" a security (i.e., has agreed to sell a security they do not own) may borrow the security for immediate delivery. To protect the lender, the investor must provide collateral to cover the value of the borrowed securities while the loan is in place. In recent years, securities lending activity has been driven by hedge funds, broker-dealers, and prime brokers looking to generate a profit through short sales, arbitrage, or market making.

The benefit of securities lending to institutional investors is the opportunity to earn incremental income from fully collateralized loans to selected borrowers. It can be viewed as a relatively low-cost source of leverage. Institutional investors generally participate through custom programs offered through their custodian bank or through large index fund providers who assume the role of lending agent. However, third parties may also provide such programs, some active managers may engage in securities lending, and some large institutional investors operate their own programs.

Mechanics of securities lending

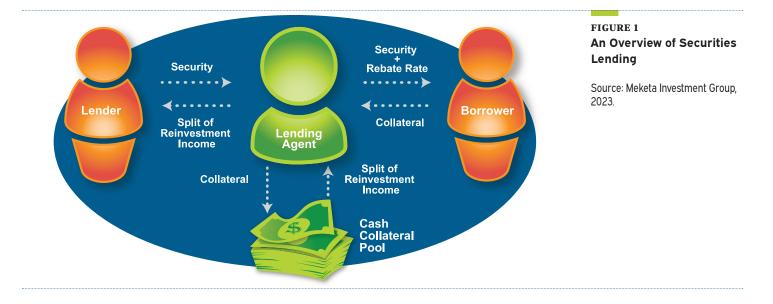
In the case of a custom program, an institutional investor allows the program provider/lending agent (e.g., custodian bank) to take shares from the fund's separate account portfolios and lend them to "approved" creditworthy broker-dealers who need shares. In return, broker-dealers are required to post collateral as an insurance against default: the inability to return the borrowed securities. The collateral amount is typically set at a level greater than the borrowed securities, usually ranging from 102% for domestic securities to 105% for foreign securities. At the end of each market day, the program provider "marks-to-market" the loaned securities. If the price of the borrowed securities has increased, then the borrower must deliver additional collateral. Conversely, if the price of the borrowed securities has decreased, the lending agent must return collateral to the borrower. Furthermore, the lending agent in general pays a "rebate rate" to the broker-dealer on its collateral. While the rebate rate is typically negotiated at levels around the short-term risk-free rate, it can vary depending on the borrowing demand for a security and at times become negative. Since ownership has been temporarily allocated to the borrower, the borrower may be required to satisfy any dividends due during that period.

Next, the custodian bank invests the cash collateral in a short-term fixed income investment strategy, often referred to as a "collateral pool," while the securities are on loan. For non-cash collateral, such as other securities, the borrower pays the lending agent a fee or premium and there is no reinvestment of collateral, nor any rebate fee paid to the borrower. Once a broker/dealer no longer needs the borrowed shares, they are returned to the lending agent and thus to the investor's portfolio. The lending agent then releases the collateral plus any due compensation to the broker/ dealer. The potential for revenue lies in investing the broker/dealer's collateral at a rate higher than the rebate rate.

Proxy voting

Upon receiving a lent security, the borrower generally assumes its voting rights for the duration of the loan. While a "soft" securities loan may allow the simple recall of shares for lenders to exercise voting rights, a "hard" securities loan may contractually restrict such action, freezing opportunities for securities recall.¹ Voting rights have their virtues for some lending institutions, as historically indicated by the short supply of lendable shares placed on hold by such funds during proxy voting periods.² Proxy voting may work around the limited flexibility of index funds to generate profit and allow investors to express their preferences in matters of corporate governance.³ However, the potential revenue of a lending agent must perform due diligence when deciding whether or not to cast a vote. In the US, borrowers are not permitted to acquire securities exclusively for their voting benefits, as per compliance with the Permitted Purpose requirement.⁴

- ¹ Source: Madigan, P. (January 2020). Stock Lending: Dispelling the Myths. *BNY Mellon*.
- ² Source: Aggarwal, R., Saffi, S., & Sturgess, J. (January 12, 2011). Proxy Voting and the Supply/ Demand for Securities Lending. Harvard Law School Forum on Corporate Governance.
- ³ Source: Lee, A. (March 17, 2021). Every Vote Counts: The Importance of Fund Voting and Disclosure. *The US Securities and Exchange Commission.*
- ⁴ Source: Nelson, L. (September 29, 2009). The Future of Securities Lending and Potential Regulatory Solutions: Market Evolution; SEC's Role; Accessing any Regulatory Gaps. SEC Securities Lending and Short Sale Roundtable.



Securities lending revenue

Any profit earned is split between the investor and lending agent as determined at the outset of the agreement. Generally, the revenue split ranges from 90%/10% in favor of the institutional investor to an even 50%/50% between the lender and agent. The revenue split has shifted heavily in favor of the investor in recent decades. The more favorable splits emerged post-Global Financial Crisis ("GFC"), as lending agents wished to provide an incentive for investors to maintain securities lending programs during and after a tumultuous period. The overall size of the program, as well as other relationships that may exist between the lender and the agent (e.g., serving as their custodian) can affect the split.

The return generated from a securities lending program over a business cycle has varied by asset class. Over the last several years, large capitalization equity portfolios across the globe have generated approximately one to three basis points of net lending profit per year. In contrast, small capitalization equity portfolios have generated more than 10 basis points of net lending profit per year. Fixed income portfolio revenue can vary substantially with the aggressiveness of the associated collateral investment program. Collateral reinvestment along typical money-market-like guidelines generally leads to low lending rates and several basis points net returns. Introducing slightly greater credit and duration risk into the reinvestment portfolio can lead to net income generation in excess of 10 basis points for high quality bond lending.⁵

For the month of December 2022, global securities finance revenues totaled \$1.04 billion.⁶ As illustrated by Figure 2, the greatest share of revenues came from equities based in the Americas (e.g., the US), and government bonds produced nearly twice as much revenue as did corporate bonds. In aggregate, there was roughly an 80/20 split between revenues from equities and fixed income.

⁵ Lending yield estimate based on medium-term (3-year) postsplit lending yields based on proprietary lender information made available to Meketa.

⁶ Source: Chessum, M. (January 4, 2023). Securities Finance Snapshot, December 2022, S&P Global. The terms securities lending and securities finance are often used interchangeably, but the latter could theoretically also include repo transactions & sell/buy backs.

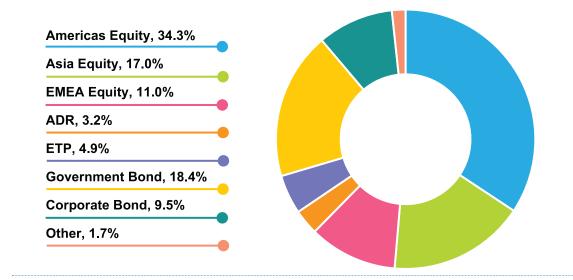


FIGURE 2 Global Securities Finance Market – December 2022

Source: (2023). *S&P Global Securities Finance.*

Both the ability to generate income and the associated risk of a program is influenced by its investment strategy, such as volume lending or value lending. **Volume-focused** investors seek to increase the amount of securities on loan; however, higher lending volumes are frequently accompanied by lower collateral fees with less profit potential. Meanwhile, **value-focused** investors prioritize lending "specials" to raise the potential for increased revenues. 'Specials' is the term used for hard-to-borrow securities, characterized by their higher borrowing fees and low supply. Their use can make the process of short-selling difficult.

Risks

The primary risks associated with participation in a securities lending program are counterparty risk, operational risk, collateral investment risk, liquidity risk, and transaction risk. Details of each type of risk are discussed below.

→ Counterparty risk: The risk that the borrower defaults and does not return the borrowed securities. Occasionally, a participant will fail to return a borrowed security, thus forfeiting the collateral. To minimize this risk, program providers may screen counterparties prior to participating in a securities lending process. In addition to careful borrower selection, lenders may also find it beneficial to limit the amount of loans available to each borrower, thereby diversifying counterparty exposure. Overcollateralization also equips investors with a strong defense against default risk. If collateral was at or exceeded a level greater than the amount of the borrowed securities, lenders could liquidate collateral to compensate for valuation losses. Program providers may also offer to indemnify (i.e., insure) the institutional investor against counterparty risk. However, indemnification does not generally protect against cash reinvestment losses, and default risk has remained a relatively low-risk event. Investors may find it beneficial to view indemnification as a last layer of risk protection rather than as a primary default-risk-mitigating measure.

- → Operational risk: The risk that the mechanics of the securities lending program are not adequately or properly monitored. For example, the lending agent may fail to require sufficient collateral (i.e., mark to market), increasing the potential for loss if the counterparty were to default. As with counterparty risk, program providers may offer to indemnify the institutional investor against operational risk.
- → Collateral investment risk: The risk that the invested collateral declines in value. This could occur if an issuer in the collateral investment pool were to default, if there is a substantial widening in credit spreads, or if an increase in interest rates causes the market value of the collateral investments to fall. The first event would result in a realized loss, while the latter two events would cause unrealized losses. These unrealized losses would become realized if the institutional investor exited the program or if they (or an auditor) decided to mark these assets to market. To minimize this risk, program providers typically restrict the types of investments in which collateral may be invested to conservative short-term instruments. However, guidelines and investments will vary by manager and/or collateral pool.
- → Liquidity risk: The risk that the institutional investor will not be able to retrieve its capital when required. This could happen for one of two reasons related to the above risks. First, if the counterparty failed to return a borrowed security, it would be impossible to liquidate that asset, though collateral could potentially be liquidated in its place. Second, if losses on invested collateral are significant, the lender may have its overall portfolio liquidity reduced. In the case of directly invested collateral, the lender may need to liquidate other assets to make good on its commitment to return collateral at the end of the loan term. In the case of assets invested in a "collateral pool," the program provider may impose a "gate," or a restriction on the ability to redeem capital from the pool so that the provider does not have to sell collateral pool assets at a loss in order to meet withdrawal requests.
- → Transaction risk: Program providers seek to minimize disruption to the investment management process through software systems designed to integrate with the investment manager. However, if a portfolio manager wishes to sell a security that the institutional investor has out on loan, there can be a delay in execution or settlement while the lending agent resolves the situation.

As noted above, some program providers offer to indemnify participants against counterparty risk and operational risk. In some limited instances, the provider may offer to indemnify certain forms of reinvestment risk as well. They generally do so in return for a higher portion of the revenue split. The specific terms of securities lending contracts vary from provider to provider, as does the degree of indemnification. Investment performance risk, however, cannot be eliminated. Over the years, program providers have suffered losses in collateral pool investments (via both pooled and separate accounts) resulting from unfavorable interest rate bets, declining credit ratings, defaults, and even rogue trading. In most cases, program providers have chosen to absorb the losses to preserve their business reputations. However, in 2008, most program providers had losses that they were unable or unwilling to absorb. Securities lending providers either forced institutional investors to remain invested in the lending program or required investors/lenders who were exiting lending programs to recognize the losses. In addition, several commingled index funds that engaged in securities lending were forced to impose limits on redemptions. In short, positions that were once liquid became illiquid.

Perhaps the most useful way to conceptualize the risk is to recognize that the value added in a securities lending program, with the exception of specials-based programs, lies in "borrowing" assets at one rate and aiming to "lend" the amount at a higher rate. The rebate owed, in effect, makes the lender "short" the risk-free rate. As a result, the potential for profit resides in successfully investing the collateral at a return greater than the risk-free rate.

Like other fixed income strategies, managers of the collateral pool can attempt to do so by extending the overall time to maturity, investing in securities that possess added credit risk, anticipating spread movements, or identifying other opportunities. In these cases, however, the credit, yield, volatility, and duration risks are typically limited; by definition, to beat the risk-free rate, managers need to take on some added risk. Nonetheless, overall investment success will be due to the lending agent's ability to make advantageous loans and the skill of the collateral investment manager.

In an environment of low interest rates and tight credit spreads, the income that can be earned from a securities lending program is reduced. When yields are low, the program provider might invest in riskier securities in an effort to compensate for the diminished income level.

An important distinction should be made between the two most common securities lending programs an institutional investor may experience. The first is a securities lending program that is run by the custodian and involves lending out securities held in separate accounts. In this type of program, the securities lent come from several different managers and investment strategies. In other words, the lending activity is diversified and less impacted by redemptions from a single portfolio. To a large extent, institutional investors maintain the ability to liquidate assets and portfolios. The second type of securities lending exposure comes from investing in commingled funds⁷ that engage in securities lending. In this case, the securities lent all come from the one fund and the fund manager or its lending agent have the ability to prevent or limit redemptions.

While both types of programs may experience losses in the collateral pool, there is a greater breadth of opportunity to monitor a fund's liquidity in the first type

⁷ Including 40 Act funds (i.e., mutual funds). than in the second. For example, in 2008, many custodians put a "floor" in place that required a minimum percentage of separate account assets be out on (or available for) loan, so the separate accounts were liquid, but only up to this point (i.e., the floor). In contrast, many commingled index funds that offered securities lending all but eliminated their investors' ability to withdraw assets from these funds. In many cases, institutional investors were limited in their ability to make withdrawals, no matter their liquidity needs. Such constraints clearly impair an institutional investor's ability to rebalance or redeem for other spending needs.

Program monitoring and sustainability

Securities lending programs should be monitored, just like any other investment program. Institutional investors should perform periodic reviews of the collateral pools backing a lending program and performing due diligence on program managers. Ideally, these collateral pools will be invested conservatively, as the manner in which this collateral is invested is a primary determinant of the risk in the overall program. Most importantly, institutional investors should limit their overall securities lending exposure to ensure that they maintain adequate levels of liquidity to fund ongoing expenditures.

Proper evaluation of securities lending programs requires a certain degree of transparency between borrowing and lending counterparties, though informational disclosure within the securities lending market is currently limited. Transactional data is often decentralized and not reported in its entirety, leading to a false consensus about prevailing market conditions, which ultimately creates market inefficiencies. This lack of serviceable, publicly accessible data also decreases the regulatory abilities of the US Securities and Exchange Commission ("SEC").⁸ The SEC has underlined the importance of ensuring accessibility to "fair, accurate, and timely information" that would benefit investors, borrowers, and lenders alike.⁹ As such, market participants have been calling for more transparency in securities lending programs.

Investors' growing interest in sustainability has further strengthened the need for better market transparency. Investor and stakeholder interest in Environmental, Social, and Governance ("ESG") principles, which guide socially responsible investment decision making and management, has increased in recent years. In a Morningstar study of 500 global asset owners, including pensions and sovereign wealth funds, 85% viewed ESG standards as material to investment policy, with 70% believing that ESG standards had grown materially in the past five years.¹⁰ As investors increasingly align their sustainability principles with their portfolios, ESG strategies become more prevalent in capital markets operations, particularly within the chain of securities lending transactions.

⁸ Source: Securities Lending Transparency (2021). *The US Securities and Exchange Commission.*

⁹ Source: Gensler, G. (November 18, 2021). Proposed Updates to Securities Lending Market. *The US Securities and Exchange Commission.*

¹⁰ Source: (October 6, 2022). Morningstar's Survey of 500 Global Asset Owners. *Morningstar, Inc.* Within the scope of securities lending, ESG considerations may influence decisions surrounding counterparty involvement, cash reinvestment, collateral, and proxy voting.¹¹ Perhaps a lending institution will only consider potential borrowers with similar ESG principles, which may lead to the development of criteria that asses a counterparty's ESG policies.¹² This screening criteria may be measured in the form of performance scores based on how a counterparty responds to "financially material ESG challenges," as in the case of the R-factor system established by State Street.¹³

In terms of collateral, lenders may apply their ESG portfolio strategy to their temporarily held collateral or establish a new ESG strategy altogether.¹⁴ Lenders may also require that the composition of their received collateral follows their own ESG values. Securities may not even be lent if their voting agendas center around ESG-related issues.¹⁵ If such securities are lent, there should be transparency on proxy record dates to ensure proper timing on their recall, as well as thorough examination of the ESG issues featured in the vote to determine if they are strategically important enough to be recalled.

Despite concerns surrounding the compatibility of ESG objectives and securities lending practices, with the establishment of broader initiatives, their successful integration appears possible. In a study of 44 institutional investors, including asset managers, pensions, and sovereign wealth funds, 95% of respondents answered "yes" to the question, "can ESG investing and securities lending co-exist?"¹⁶ However, only 18% of respondents had actively integrated ESG investing and securities lending at the time of the study. To align with the evolving values of investors, it is possible the securities lending industry may develop best practices for sustainability measures and an improved methodology for matching like-minded lenders and borrowers.

Market evolution following the GFC

In order to generate additional income throughout the early to mid-2000s, many securities lending programs invested portions of their collateral pool in securities that carried significant credit risk or had a long time to maturity (e.g., long-term MBS). As the mortgages underlying securitized products began to fail at the beginning of the GFC, securities loan recalls increased just as riskier and longer-term collateral began to suffer losses. This dynamic caused many lenders to be "upside down" on their loans, with less collateral than necessary available to return to their borrowers.

Collateral impairment had different impacts depending on the structure of the lending program. In commingled vehicles with lending programs, collateral pools tended to transact as though the collateral was not impaired (i.e., maintained a net asset value of \$1 per share) but used liquidity restrictions to prevent a "run" on collateral. Ultimately, many managers funded any differences in their collateral

- ¹¹ Source: Budh-Raja, I. (2022). The Road Ahead: Integrating: ESG Standards in Securities Lending for Asset Owners. *BNY Mellon.*
- ¹² Source: (August 30, 2022). ESG Principles in Securities Lending: The Essential Role of Data. *Securities Finance Times*.
- ¹³ Source: Pugh, A. (April 19, 2021). State Street to Launch ESG Securities Lending Collateral Investment Strategy. Securities Finance Times.
- ¹⁴ Source: Budh-Raja, I. (2022). The Road Ahead: Integrating: ESG Standards in Securities Lending for Asset Owners. *BNY Mellon.*
- ¹⁵ Source: Schwartz, D. (October 20, 2020). Squaring ESG With Securities Lending. *Center for the Study of Financial Market Evolution.*
- ¹⁶ Source: Krasowski, S., & Devlin, F. (October 8, 2020). RMA Survey Finds ESG Investing and Securities Lending Can Coexist. *Risk Management Association.*

pools. In separate accounts, client collateral impairments were extended loans by lending agents to allow the program to continue to function. However, these clients generally still owed the lending entity for the funds necessary to cover the shortfall.

Given this experience, there was a subsequent shift in the market toward reduction of collateral pool risk with movement toward money-market-like (2a-7 type) restrictions.¹⁷ Lenders require cash collateral with higher credit quality, higher liquidity requirements, and shorter time to maturity. The GFC also led to improved risk management across the board for lending programs. There is now much greater scrutiny of borrowers and exposure limitations to reduce counterparty risk, with additional stress testing requirements throughout the system.

Rising interest rates allow for greater income to be earned from collateral; however, rising interest rates may signal increased volatility. Given that nearly 90% of all cash collateral exchanged in the securities lending market is in US dollars, fluctuating US interest rates can have a notable impact upon revenue.¹⁸ Cash collateral for lent securities results in the borrower receiving a rebate rate in return, a rebate usually quoted to reference a benchmark rate such as the Overnight Bank Funding Rate¹⁹ when using US dollars. Rebate rates decrease as demand for a security increases. Cash collateral is reinvested by agents into reverse repurchase transactions or short-term money market instruments with different maturity dates. These different maturity dates may result in some disparities in duration between the loan and cash reinvestment which, in consequence, cause spreads to widen when interest rates are cut, and tighten when interest rates rise.

Conclusion

Similar to other aspects of investing, securities lending provides the potential for higher returns in exchange for increased risk. Securities lending programs can generate modest incremental revenue, varying based on the lending approach and revenue split. Still, although not likely under normal market conditions, securities lending programs can also result in securities being lost to defaulted borrowers or liabilities being owed to borrowers for bad collateral. For lending programs within pooled vehicles, there is also an additional risk of redemption restrictions or forced in-kind redemptions due to impaired collateral.

Selection of a skilled agent with a competitive fee split is important to both generating income and controlling risk. The amount of income, and risk, in any securities lending program is determined largely by its investment approach (e.g., value versus volume lending) and how the borrowing collateral is invested. With these considerations in mind, investors may find that controlled exposure to securities lending can provide added income with an acceptable risk level.

¹⁷ Rule 2a-7 is the principal rule governing money market funds. It addresses issues such as liquidity and pricing.

- ¹⁸ Source: Poulton, D. (March 21, 2022). The Impact of Interest Rate Changes on Securities Lending Cash Reinvestment Revenue. *Datalend*.
- ¹⁹ The overnight bank funding rate is calculated using federal funds transactions and certain Eurodollar transactions.

Investors may find that a value-focused approach to securities lending mitigates the risk of collateral impairment. Furthermore, alternative risk mitigation methods (e.g., collateral management, counterparty management) may result in a higher volume of lending with levels of risk similar to a standard value approach. Viewing lending processes through an asset allocation lens may also mitigate associated risk, as some assets may be more prudent to lend than others. For example, investors may opt not to lend their investment grade bonds, as these may be earmarked for providing liquidity during turbulent market conditions. By familiarizing themselves with the roles and qualities of their assets, including growth, income, or inflation protection potential, and by understanding how these qualities can inform their securities lending decisions, investors may achieve a portfolio position of relative stability.

Disclaimers

This document is for general information and educational purposes only, and must not be considered investment advice or a recommendation that the reader is to engage in, or refrain from taking, a particular investment-related course of action. Any such advice or recommendation must be tailored to your situation and objectives. You should consult all available information, investment, legal, tax and accounting professionals, before making or executing any investment strategy. You must exercise your own independent judgment when making any investment decision.

All information contained in this document is provided "as is," without any representations or warranties of any kind. We disclaim all express and implied warranties including those with respect to accuracy, completeness, timeliness, or fitness for a particular purpose. We assume no responsibility for any losses, whether direct, indirect, special or consequential, which arise out of the use of this presentation.

All investments involve risk. There can be no guarantee that the strategies, tactics, and methods discussed in this document will be successful.

Data contained in this document may be obtained from a variety of sources and may be subject to change. We disclaim any and all liability for such data, including without limitation, any express or implied representations or warranties for information or errors contained in, or omissions from, the information. We shall not be liable for any loss or liability suffered by you resulting from the provision to you of such data or your use or reliance in any way thereon.

Nothing in this document should be interpreted to state or imply that past results are an indication of future performance. Investing involves substantial risk. It is highly unlikely that the past will repeat itself. Selecting an advisor, fund, or strategy based solely on past returns is a poor investment strategy. Past performance does not guarantee future results.